

REMARKS**I. General**

Claims 1, 3-6, 8-27, and 29-53 are pending in the present application. Applicant notes with appreciation that the Examiner has allowed claims 38-53. Claims 14 and 23 have been canceled by the present Amendment. Accordingly, claims 1, 3-6, 8-13, 15-22, 24-27, and 29-53 will remain pending after entry of the present Amendment.

Claims 1, 3-6, 8-27, and 29-37 stand rejected under 35 U.S.C. § 103. Applicant respectfully traverses the rejections of record.

II. The 35 U.S.C. § 103 Rejections

Claims 1, 3-6, 8-27, and 29-37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Caporizzo et al., patent number 6,014,547 (hereinafter *Caporizzo*), in view of Yamashita et al., patent number 4,419,768 (hereinafter *Yamashita*). To establish a *prima facie* case of obviousness, three basic criteria must be met, see M.P.E.P. § 2143. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Without conceding the second criteria, Applicant respectfully asserts that the references lack proper motivation to combine in addition to lacking all the claim limitations.

A. The Limitations of Independent Claims 1 and 32 are not Met by *Caporizzo* and *Yamashita*

In rejecting independent claims 1 and 32, the Examiner opines that the power-up signal equalization technique of *Caporizzo* provides means for determining from a measurement of measurable characteristics that are present in a particular set of signals certain desirable tuner operating characteristics and means operable under control of the determining means for changing the operating characteristics of the tuner, see the Office Action at pages 2-3. However, the Examiner concedes that *Caporizzo* does not teach changing power consumption levels with respect to tuner components to optimize a tuner

power level. The Examiner asserts that *Yamashita* discloses a tuner which is controlled to reduce power consumption by switching to UHF channels to optimize to a level sufficient to compensate the loss introduced to tuning components, see the Office Action at page 3. The Examiner opines that, as *Caporizzo* and *Yamashita* are in the same field, one of ordinary skill in the art would have found it obvious to modify the power-up equalization technique of *Caporizzo* to implement the UHF power consumption reduction technique of *Yamashita* in order to meet the claims. Applicant asserts that the proffered modification of *Caporizzo* in view of *Yamashita* does not meet the claims.

Claim 1 recites:

means for determining from a measurement of the measurable characteristics which are present in a particular set of signals input to said tuner certain tuner operating characteristics; and

means operable under control of said determining means for . . . changing power consumption levels with respect to certain of said tuner components to meet desired tuner output characteristics when processing said specific signals

Accordingly, the invention of claim 1 provides for changing power consumption levels with respect to certain of the tuner components, to meet desired tuner output characteristics when processing specific signals, under control of a means for determining those tuner operating characteristics from measurements of signals input to the tuner.

In contrast to the claimed invention, *Caporizzo* teaches “equalizer 50 compensates for the difference in the signal level between the lower frequencies and the higher frequencies by attenuating the frequencies having a higher signal level to the same level as the frequencies having a lower signal level,” column 3, lines 2-6. *Yamashita* merely teaches that when a switch is moved to the “[UHF] mode, the active circuits of the CATV tuning section 200 are de-energized to disable the operation thereof,” column 4, lines 47-49. Applicant respectfully asserts that even if one of ordinary skill in the art were to modify the power-up equalization technique of *Caporizzo* to include the tuning section de-energizing technique of *Yamashita*, the resulting combination would merely provide a system in which portions of the signal band will be equalized independent from de-energizing a CATV tuning section when a UHF mode selector switch is activated. There is nothing in this combination to meet the recited changing power consumption levels of tuner components to meet desired tuner output

characteristics which are determined from measurements of signals input to the tuner. Indeed, in the resulting combination of *Caporizzo* and *Yamashita*, there is no interaction between the power-up signal equalization and the tuner component de-energizing whatsoever. Accordingly, claim 1 and the claims dependent therefrom are patentable over the 35 U.S.C. § 103 rejection of record.

Claim 32 has been amended to expressly recite power level determination and adjustment with respect to a plurality of tuner components, as described in the specification *inter alia* at page 9, lines 25-27. Claim 32, as amended, recites:

determination circuitry for identifying which signal set is being processed at a point in time and determining an appropriate power level for each of a plurality of tuner components of said tuner for processing said signal set; and
adjustment circuitry operable in cooperation with said determination circuitry for implementing said power levels with respect to said tuner components in accordance with the signal set then being processed.

Accordingly, the invention of claim 32 provides for determining appropriate power levels for a plurality of tuner components, cooperating with signal set identifying circuitry, for processing an identified set of signals.

Neither *Caporizzo* nor *Yamashita* teach or suggest determining an appropriate power level for each of a plurality of tuner components for processing an identified signal set and adjustment circuitry for implementing the determined power levels. Moreover, as discussed above with respect to claim 1, the combination of *Caporizzo* and *Yamashita* proffered in the Office Action does not provide the requisite interaction between determination circuitry and adjustment circuitry as set forth in the claim. Accordingly, claim 32 and the claims dependent therefrom are patentable over the 35 U.S.C. § 103 rejection of record.

B. The Limitations of Independent Claims 6, 9, 18, and 26 are not Met by *Caporizzo* and *Yamashita*

In rejecting independent claims 6, 9, 18, and 26, the Examiner opines that the power-up signal equalization technique of *Caporizzo* provides for assessing from time to time the incoming signal environment wherein an assessment of the incoming signal environment is a function of signals being processed by the tuner and that, based on the signal environment

assessment, an operating level for the tuner is selected and set, see the Office Action at page 4. However, the Examiner concedes that *Caporizzo* does not teach selecting an optimum power consumption level for the tuner. The Examiner asserts that *Yamashita* discloses a tuner which is controlled to reduce power consumption by switching to UHF channels to optimize to a level sufficient to compensate the loss introduced to tuning components, see the Office Action at page 4. The Examiner opines that, as *Caporizzo* and *Yamashita* are in the same field, one of ordinary skill in the art would have found it obvious to modify the power-up equalization technique of *Caporizzo* to implement the UHF power consumption reduction technique of *Yamashita* in order to meet the claims. Applicant asserts that the proffered modification of *Caporizzo* in view of *Yamashita* does not meet the claims.

Claim 6 recites:

assessing . . . the incoming signal environment . . . ;
based upon said assessed incoming signal environment
selecting an operating level for said tuner, wherein said
selecting step includes the step of selecting an optimum power
consumption level for said tuner

Accordingly, the invention of claim 6 provides for selecting an optimum power consumption level for the tuner based upon an assessed incoming signal environment.

As discussed above, *Caporizzo* teaches “equalizer 50 compensates for the difference in the signal level between the lower frequencies and the higher frequencies by attenuating the frequencies having a higher signal level to the same level as the frequencies having a lower signal level,” column 3, lines 2-6. *Yamashita* teaches that when a switch is moved to the “[UHF] mode, the active circuits of the CATV tuning section 200 are de-energized to disable the operation thereof,” column 4, lines 47-49. Applicant respectfully asserts that even if one of ordinary skill in the art were to modify the power-up equalization technique of *Caporizzo* to include the tuning section de-energizing technique of *Yamashita*, the resulting combination would not provide a method wherein an optimum power consumption level for a tuner is selected based upon an assessed incoming signal environment. In contrast, the Examiner’s proffered combination of *Caporizzo* and *Yamashita* results in portions of the signal band being equalized independent from de-energizing a CATV tuning section when a UHF mode selector switch is activated. There is nothing in this combination to meet the recited selecting an optimum power consumption level for the tuner based upon an assessed

incoming signal environment. Accordingly, claim 6 and the claims dependent therefrom are patentable over the 35 U.S.C. § 103 rejection of record.

Claim 9 has been amended to include the limitations previously set forth in claim 14. Accordingly, claim 14 has been canceled by the present Amendment and claim 15 has been amended to depend from claim 9 as well as to make clear the aspect further modified in light of the amendment to claim 9. Claim 9 has further been amended to recite component power consumption adjustment to achieve a desired intercept point for the components, as described in the specification, *inter alia*, at page 10, lines 1-8. Claim 9, as amended, recites:

determining optimal tuner power consumption from knowledge of the signals being processed by the tuner; and
adjusting the tuner power consumption in accordance with said determining step, wherein said adjusting step includes the step of adjusting power consumption of certain tuner components within said tuner to achieve a desired intercept point for each component of said certain tuner components.

Accordingly, the invention of claim 9 provides for determining optimal tuner power consumption from knowledge of signals being processed and adjusting the tuner power consumption in accordance with the determined optimal tuner power consumption. Moreover, claim 9 not only recites adjusting power consumption of certain components within the tuner, but further recites adjusting power consumption of components to achieve a desired component intercept point.

As discussed above, *Caporizzo* teaches “equalizer 50 compensates for the difference in the signal level between the lower frequencies and the higher frequencies by attenuating the frequencies having a higher signal level to the same level as the frequencies having a lower signal level,” column 3, lines 2-6. *Yamashita* teaches that when a switch is moved to the “[UHF] mode, the active circuits of the CATV tuning section 200 are de-energized to disable the operation thereof,” column 4, lines 47-49. Applicant respectfully asserts that even if one of ordinary skill in the art were to modify the power-up equalization technique of *Caporizzo* to include the tuning section de-energizing technique of *Yamashita*, the resulting combination would merely provide a system in which portions of the signal band will be equalized independent from de-energizing a CATV tuning section when a UHF mode selector switch is activated. There is nothing in this combination to meet the recited adjusting

tuner power consumption by adjusting power consumption of certain components from knowledge of the signals being processed by the tuner. Accordingly, claim 9 and the claims dependent therefrom are patentable over the 35 U.S.C. § 103 rejection of record.

Moreover, claim 9 as amended recites adjusting tuner component power levels to achieve a desired intercept point. Although the Examiner, in addressing the limitations of claims 14 and 15, asserts that *Caporizzo* discloses adjusting the number of components that are active at any particular time, a review of *Caporizzo* reveals that the disclosure therein is insufficient to meet the claims. The portion of *Caporizzo* relied upon by the Examiner to disclose adjusting a number of components which are active, merely teaches using a filter to remove various frequency components from the signal, see column 4, lines 15-17. This disclosure is insufficient to meet the claim. Additionally, there is nothing in the disclosure of *Caporizzo* or *Yamashita* to teach or suggest adjusting tuner component power levels to achieve a desired intercept point. Accordingly, claim 9 and the claims dependent therefrom are asserted to be patentable under 35 U.S.C. § 103.

Similar to claim 9 discussed above, claim 18 has been amended to include the limitations previously set forth in claim 23. Accordingly, claim 23 has been canceled by the present Amendment and claim 24 has been amended to track the changes to claim 18. Claim 18, as amended, recites:

a circuit for determining acceptable tuner power consumption from knowledge of the signals being processed by the tuner; and
at least one circuit for adjusting the tuner power consumption in accordance with said determining circuit, wherein said adjusting circuit adjusts the power consumption of certain tuner components within said tuner.

Accordingly, the invention of claim 18 provides for determining acceptable tuner power consumption from knowledge of signals being processed and adjusting the tuner power consumption in accordance with the determined optimal tuner power consumption.

As discussed above, *Caporizzo* teaches “equalizer 50 compensates for the difference in the signal level between the lower frequencies and the higher frequencies by attenuating the frequencies having a higher signal level to the same level as the frequencies having a lower signal level,” column 3, lines 2-6. *Yamashita* teaches that when a switch is moved to

the “[UHF] mode, the active circuits of the CATV tuning section 200 are de-energized to disable the operation thereof,” column 4, lines 47-49. Applicant respectfully asserts that even if one of ordinary skill in the art were to modify the power-up equalization technique of *Caporizzo* to include the tuning section de-energizing technique of *Yamashita*, the resulting combination would merely provide a system in which portions of the signal band will be equalized independent from de-energizing a CATV tuning section when a UHF mode selector switch is activated. There is nothing in this combination to meet the recited adjusting tuner power consumption by adjusting power consumption of certain components from knowledge of the signals being processed by the tuner. Accordingly, claim 18 and the claims dependent therefrom are patentable over the 35 U.S.C. § 103 rejection of record.

Moreover, claim 18 recites adjusting certain tuner component power levels. Although the Examiner asserts that *Caporizzo* discloses adjusting the number of components that are active at any particular time, see the Office Action at page 5, a review of *Caporizzo* reveals that the disclosure therein is insufficient to meet the claims. The portion of *Caporizzo* relied upon by the Examiner to disclose adjusting a number of components which are active, merely teaches using a filter to remove various frequency components from the signal, see column 4, lines 15-17. This disclosure is insufficient to meet the claim. Accordingly, claim 18 and the claims dependent therefrom are asserted to be patentable under 35 U.S.C. § 103.

Claim 26 has been amended to recite tuner component power consumption adjustment to achieve a desired intercept point for the components, as described in the specification, *inter alia*, at page 10, lines 1-8. Claim 26, as amended, recites:

circuitry for determining desired power consumption of certain tuner components from knowledge of signals being processed by the tuner; and
circuitry operable in cooperation with said determining circuitry for adjusting the power consumption of said certain tuner components to achieve a desired component intercept point.

Accordingly, the invention of claim 26 provides for determining desired power consumption of certain tuner components from knowledge of signals being processed and adjusting the power consumption of the tuner components to achieve a desired component intercept point.

As discussed above, *Caporizzo* teaches “equalizer 50 compensates for the difference in the signal level between the lower frequencies and the higher frequencies by attenuating the frequencies having a higher signal level to the same level as the frequencies having a lower signal level,” column 3, lines 2-6. *Yamashita* teaches that when a switch is moved to the “[UHF] mode, the active circuits of the CATV tuning section 200 are de-energized to disable the operation thereof,” column 4, lines 47-49. There is nothing in the disclosure of *Caporizzo* or *Yamashita* to teach or suggest adjusting tuner component power levels to achieve a desired component intercept point. Accordingly, claim 26 and the claims dependent therefrom are asserted to be patentable under 35 U.S.C. § 103.

C. Proper Motivation to Combine *Caporizzo* and *Yamashita* has Not Been Provided

Applicant respectfully asserts that proper motivation for combination of *Caporizzo* and *Yamashita* has not been established as required under 35 U.S.C. § 103. It is well settled that the fact that references can be combined or modified is not sufficient to establish a *prima facie* case of obviousness, M.P.E.P. § 2143.01. The language of the motivation recited in the Office Action (see pages 3 and 4) is circular in nature, stating that it is obvious to make the modification (reduce power consumption to compensate the loss introduced to tuning components) because it is obvious to achieve the result (to acquire best reception by adjusting the power consumption of the tuner). Such language is merely a statement that the reference can be modified, and does not state any desirability for making the modification. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination, M.P.E.P. § 2143.01 (citing *In re Mills*, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990)). Thus, the motivation provided by the Examiner is improper, as the motivation must establish the desirability for making the modification.

D. The Dependent Claims

Each of dependent claims 3-6, 8, 10-13, 15-17, 19-22, 24, 25, 27, 29-31, and 33-37 depend directly or indirectly from claim 1, 6, 9, 18, 26, and 32. Applicant has shown how each of independent claims 1, 6, 9, 18, 26, and 32 are patentable over the applied art. It is respectfully asserted that, at least for the reasons set forth above with respect to the

independent claims, that dependent claims 3-6, 8, 10-13, 15-17, 19-22, 24, 25, 27, 29-31, and 33-37 are allowable over the applied art. Moreover, these dependent claims present new and non-obvious limitations not shown in the applied art.

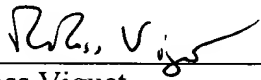
III. Summary

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 06-2380, under Order No. 49581/P016US/09806411 from which the undersigned is authorized to draw.

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Respectfully submitted,

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